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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 10/510,004 | 09/30/2004 | Christoph Helmut Bathe | PHDE020060US | 9843 |
| 7590 03/01/2006 | | | EXAMINER | |
| Philips Intellectual Property & Standards 595 Miner Road Cleveland, OH 44143 | | | MIDKIFF, ANASTASIA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2882 | |

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/510,004 | BATHE ET AL. | |
| | Examiner | Art Unit | |
| | Anastasia Midkiff | 2882 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1,3-7,9 and 10 is/are allowed.
6) ☒ Claim(s) 11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent to Rogers et al. (USP# 6,215,852).

With respect to Claim 11, Rogers et al. teach a device for generating x-rays comprising a source (82) for emitting electrons, a carrier (80) which is rotatable about an axis of rotation (Figure 3) and which is provided with a material which generates x-rays as a result of the incidence of electrons (Column 18, Lines 2-11), a heat absorbing member (134) arranged between said source and carrier such that substantially all of the backscatter radiation strikes the surface of the heat absorbing member (Figure 6), and a thermal connection (through 132) between the heat absorbing member and a cooling system such the thermal connection is not exposed to backscatter radiation (Figure 6), the thermal connection comprising a thermal barrier (132) comprised of a different material than that which comprises the cooling system (Column 16 Lines 55-58) such that thermal barrier limits the rate of heat transfer from the heat absorbing member to the cooling system in a predetermined manner (Column 4, Lines 29-36).

Response to Arguments

Applicant's arguments, see Applicant Response, filed 30 January 2006, with respect to Claims 1, 3-7, and 9-10 have been fully considered and are persuasive. The rejections under 35 U.S.C. 102(b) and 103(a) of Claims 1, 3-7, and 9-10, have been withdrawn.

Additionally, the specification objection is withdrawn in light of applicant amendments to the specification.

Allowable Subject Matter

Claims 1, 3-7, 9, and 10 allowed.

With respect to Claim 1, the best prior art of record discloses a device for generating x-rays comprising many of the features of the claimed invention, including an electron-emitting source cathode, a carrier which is rotatable about an axis which generates x-rays as a result of the incidence of said electrons upon the material on said carrier, a heat absorbing member arranged between said source and said carrier, a cooling system which is in thermal connection with said heat absorbing member, wherein a rate of heat transfer via said thermal connection is substantially larger than a rate of heat absorption by said heat absorbing member, and wherein said thermal connection comprises a thermal barrier which limits said rate of heat transfer by virtue of the materials comprising said barrier and said absorbing member, occurring via said

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thermal connection, per unit of temperature difference between said cooling system and said heat absorbing member, in a predetermined manner.

However, the prior art fails to teach or fairly suggest a device for generating x-rays wherein the thermal barrier comprises a vacuum gap, said gap present between radiant heat transferring surfaces of said heat absorbing member and of said cooling system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anastasia Midkiff whose telephone number is 571-272-5053. The examiner can normally be reached on M-F 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASM
2/24/06



EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER

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2/27/06